

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:	10/698,600	Confirmation No.:	9871
Appellant(s):	Salo et al.		
Filed:	October 31, 2003		
Art Unit:	2425		
Examiner:	Saint Cyr, Jean D.		
Title:	SYSTEM AND ASSOCIATED TERMINAL, METHOD AND COMPUTER PROGRAM PRODUCT FOR PROVIDING BROADCAST CONTENT		

Customer No.: 00826

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APPEAL BRIEF UNDER 37 CFR § 41.37

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences," filed October 5, 2009.

1. ***Real Party in Interest.***

The real party in interest in this appeal is Nokia Corporation, the assignee of the above-referenced patent application.

2. ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3. ***Status of Claims.***

All of the pending claims, namely Claims 15-18, 20-33, 35-48 and 50-73, stand rejected and are the subject of the present appeal. The remaining claims, namely Claims 1-14, 19, 34 and 49, have been cancelled.

4. ***Status of Amendments.***

There are no unentered amendments in this application.

5. ***Summary of Claimed Subject Matter.***

The claimed invention will now be summarized with references to passages of the specification and drawings. It should be understood, however, that the references are provided solely for explanatory purposes, and should not otherwise in and of themselves be taken to limit the scope of the claimed invention.

Independent Claim 15 recites an apparatus that includes a processor **38** and a memory **40** storing executable instructions that in response to execution by the processor cause the apparatus to at least perform a number of functions. Pat. Appl., FIG. 2; and page 11, line 28 – page 12, line 16. As recited, these functions include storing, in the memory, at least one piece of pre-broadcast content. *Id.* at FIG. 8A, block **126**; FIG. 8B, block **140**; FIG. 8C, block **160**; FIG. 8D, block **176**; page 21, lines 21-31; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The pre-broadcast content is stored before a scheduled time for broadcast of the same piece(s) of content by a content source, and the scheduled time is specified by a schedule. *Id.* at page 21, line 21 – page 22, line 12; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. As also recited, the functions include accessing at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same piece(s) of content, and presenting the accessed piece(s) of pre-broadcast content consistent with the scheduled time for broadcast of the same piece(s) of content by the content source. *Id.* at FIG. 8A, blocks **128-134**; FIG. 8B, blocks **142-150**; FIG. 8C, blocks **162-172**; and FIG. 8D, blocks **180-186**; page 23, line 10 – page 25, line 20; page 27, lines 12-26; page 29, line 20 – page 30, line 16; and page 31, lines 13-20.

Dependent Claim 16 recites that the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform synchronizing the accessed piece(s) of pre-broadcast content with the same piece(s) of content broadcast by the content source. Pat. Appl., FIG. 8A, block **132**; FIG. 8B, block **148**; FIG. 8C, block **170**; FIG. 8D, block **186**; page 23, line 22 – page 25, line 8; page 27, lines 21-24; page 30, lines 11-14; and

page 31, lines 17-20. Presenting the accessed piece(s) of pre-broadcast content, then, includes presenting the synchronized piece(s) of pre-broadcast content. *Id.* at FIG. 8A, block **134**; FIG. 8B, block **150**; FIG. 8C, block **172**; FIG. 8D, block **188**; page 25, lines 9-20; page 27, lines 24-26; page 30, lines 14-16; and page 31, lines 17-20.

Independent Claim 30 recites a method that includes storing, in a memory of an apparatus, at least one piece of pre-broadcast content. Pat. Appl. at FIG. 8A, block **126**; FIG. 8B, block **140**; FIG. 8C, block **160**; FIG. 8D, block **176**; page 21, lines 21-31; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The pre-broadcast content is stored before a scheduled time for broadcast of the same piece(s) of content by a content source, and the scheduled time specified by a schedule. *Id.* at page 21, line 21 – page 22, line 12; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The method also includes accessing at least one piece of pre-broadcast content from the memory of the apparatus no sooner than the scheduled time for broadcast of the same piece(s) of content, and presenting the accessed piece(s) of pre-broadcast content consistent with the scheduled time for broadcast of the same piece(s) of content by the content source. *Id.* at FIG. 8A, blocks **128-134**; FIG. 8B, blocks **142-150**; FIG. 8C, blocks **162-172**; and FIG. 8D, blocks **180-186**; page 23, line 10 – page 25, line 20; page 27, lines 12-26; page 29, line 20 – page 30, line 16; and page 31, lines 13-20.

Dependent Claim 31 recites that the method further includes synchronizing the accessed piece(s) of pre-broadcast content with the same piece(s) of content broadcast by the content source. Pat. Appl., FIG. 8A, block **132**; FIG. 8B, block **148**; FIG. 8C, block **170**; FIG. 8D, block **186**; page 23, line 22 – page 25, line 8; page 27, lines 21-24; page 30, lines 11-14; and page 31, lines 17-20. Presenting the accessed piece(s) of pre-broadcast content, then, includes presenting the synchronized piece(s) of pre-broadcast content. *Id.* at FIG. 8A, block **134**; FIG. 8B, block **150**; FIG. 8C, block **172**; FIG. 8D, block **188**; page 25, lines 9-20; page 27, lines 24-26; page 30, lines 14-16; and page 31, lines 17-20.

Independent Claim 45 recites a computer program product for providing broadcast content, where the computer program product includes a computer-readable storage medium having computer-readable program code portions stored therein that in response to execution by

a processor cause an apparatus to at least perform a number of functions. Pat. Appl., FIG. 2; and page 11, line 28 – page 12, line 16; and page 32, line 19 – page 33, line 24. As recited, these functions include storing, in a memory of the apparatus, at least one piece of pre-broadcast content. *Id.* at FIG. 8A, block 126; FIG. 8B, block 140; FIG. 8C, block 160; FIG. 8D, block 176; page 21, lines 21-31; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The pre-broadcast content is stored before a scheduled time for broadcast of the same piece(s) of content by a content source, and the scheduled time is specified by a schedule. *Id.* at page 21, line 21 – page 22, line 12; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. As also recited, the functions include accessing at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same piece(s) of content, and presenting the accessed piece(s) of pre-broadcast content consistent with the scheduled time for broadcast of the same piece(s) of content by the content source. *Id.* at FIG. 8A, blocks 128-134; FIG. 8B, blocks 142-150; FIG. 8C, blocks 162-172; and FIG. 8D, blocks 180-186; page 23, line 10 – page 25, line 20; page 27, lines 12-26; page 29, line 20 – page 30, line 16; and page 31, lines 13-20.

Dependent Claim 46 recites that the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor causes the apparatus to further perform synchronizing the accessed piece(s) of pre-broadcast content with the same piece(s) of content broadcast by the content source. Pat. Appl., FIG. 8A, block 132; FIG. 8B, block 148; FIG. 8C, block 170; FIG. 8D, block 186; page 23, line 22 – page 25, line 8; page 27, lines 21-24; page 30, lines 11-14; and page 31, lines 17-20. Presenting the accessed piece(s) of pre-broadcast content, then, includes presenting the synchronized piece(s) of pre-broadcast content. *Id.* at FIG. 8A, block 134; FIG. 8B, block 150; FIG. 8C, block 172; FIG. 8D, block 188; page 25, lines 9-20; page 27, lines 24-26; page 30, lines 14-16; and page 31, lines 17-20.

Independent Claim 60 recites a system including a content source 32 and a terminal 12. Pat. Appl., FIGS. 1, 4; and page 20, line 31 – page 21, line 4. As recited, the content source includes a continuity server 68 configured to maintain at least one piece of content 66A and a schedule 66B, where the schedule specifies at least one scheduled time for broadcast of the

piece(s) of content by the content source. *Id.* at FIG. 4; and page 14, lines 2-30. The content source is also configured to broadcast the piece(s) of content in accordance with the schedule. *Id.* at page 15, lines 25-29.

Also per independent Claim 60, the terminal is configured to store, in a memory, at least one piece of pre-broadcast content including the same piece(s) of content maintained by the continuity server. Pat. Appl., FIG. 8A, block **126**; FIG. 8B, block **140**; FIG. 8C, block **160**; FIG. 8D, block **176**; page 21, lines 21-31; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The pre-broadcast content is stored before the scheduled time for broadcast of the same piece(s) of content. *Id.* at page 21, line 21 – page 22, line 12; page 26, line 31 – page 27, line 4; page 28, lines 7-11; and page 30, line 30 – page 31, line 2. The terminal is also configured to access the piece(s) of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same piece(s) of content, and thereafter present the accessed piece(s) of pre-broadcast content consistent with the scheduled time for broadcast of the same piece(s) of content by the content source. *Id.* at FIG. 8A, blocks **128-134**; FIG. 8B, blocks **142-150**; FIG. 8C, blocks **162-172**; and FIG. 8D, blocks **180-186**; page 23, line 10 – page 25, line 20; page 27, lines 12-26; page 29, line 20 – page 30, line 16; and page 31, lines 13-20.

Dependent Claim 61 recites that the terminal is configured to synchronize the accessed piece(s) of pre-broadcast content with the same piece(s) of content broadcast by the content source before presenting the accessed piece(s) of pre-broadcast content. Pat. Appl., FIG. 8A, block **132**; FIG. 8B, block **148**; FIG. 8C, block **170**; FIG. 8D, block **186**; page 23, line 22 – page 25, line 8; page 27, lines 21-24; page 30, lines 11-14; and page 31, lines 17-20. The terminal, then, is configured to present the synchronized piece(s) of pre-broadcast content. *Id.* at FIG. 8A, block **134**; FIG. 8B, block **150**; FIG. 8C, block **172**; FIG. 8D, block **188**; page 25, lines 9-20; page 27, lines 24-26; page 30, lines 14-16; and page 31, lines 17-20.

6. ***Grounds of Rejection to be Reviewed on Appeal.***

Pending Claims Claims 15-18, 20, 22, 23, 25, 27, 29, 45-48, 50, 52, 53, 55, 57, 59-64, 66, 67, 69, 71 and 73 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0133923 to Watson et al., in view of U.S. Patent Application Publication No. 2003/0083977 to Syed et al. Claims 24, 26, 28, 54, 56, 58, 68, 70 and 72 stand rejected as being unpatentable over Watson in view of Syed, and further in view of U.S. Patent No. 7,284,064 to Connelly; and Claims 21, 51 and 65 stand rejected as being unpatentable over Watson in view of Syed, and further in view of U.S. Patent Application Publication No. 2003/0066090 to Traw et al. Finally, Claims 30-33, 35, 37-44 stand rejected as being unpatentable over Watson, in view of Connelly; and Claim 36 stands rejected as being unpatentable over Watson in view of Connelly, and further in view of Traw. The remaining claims, namely Claims 1-14, 19, 34 and 49, have been cancelled.

7. ***Argument.***

As explained below, Appellants respectfully submit that the claimed invention is patentably distinct from Watson, Syed, Connelly and Traw, taken individually or in any proper combination. In view of the remarks presented herein, Appellants respectfully request reconsideration and reversal of the rejections of all of the pending claims.

A. Claims 15-18, 20, 22, 23, 25, 27, 29, 45-48, 50, 52, 53, 55, 57, 59-64, 66, 67, 69, 71 and 73

The Examiner rejects Claims 15-18, 20, 22, 23, 25, 27, 29, 45-48, 50, 52, 53, 55, 57, 59-64, 66, 67, 69, 71 and 73 as being unpatentable over Watson, in view of Syed. According to one aspect of the present invention, as reflected by independent Claim 15, an apparatus is provided that includes a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform a number of functions. As recited, these functions include storing, in the memory, at least one piece of pre-broadcast content. The pre-broadcast content is stored before a scheduled time for broadcast of the same piece(s) of content by a content source, and the scheduled time is specified by a schedule. As

also recited, the functions include accessing at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same piece(s) of content, and presenting the accessed piece(s) of pre-broadcast content consistent with the scheduled time for broadcast of the same piece(s) of content by the content source.

In contrast to independent Claim 15, neither Watson nor Syed, taken individually or in any proper combination, teaches or suggests an apparatus not only storing but not accessing pre-broadcast content before a scheduled time for broadcast of the same content by a content source, but also presenting the pre-broadcast content consistent with the scheduled time for its broadcast. The Examiner cites Syed for disclosing this feature. Appellants respectfully submit, however, that although one could argue Syed discloses restricting access to locally-stored content until its scheduled time for broadcast, Syed does not disclose presenting the content consistent with that scheduled time.

Relative to the above feature of independent Claim 15, the Office Action cites the following paragraph of Syed:

[0042] Thus, the iPPG is able to transmit data content (to be broadcast) in advance with the receiver display deactivate flag enabled (data content is not activated). At prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-download broadcast content available for presentation to the receiver.

In the preceding paragraph, Syed discloses a constraint to a receiver/terminal access of locally-stored content, which appears similar to Watson disclosing setting a start date at which time a transmitted movie may be accessed from the set-top box. As disclosed, this constraint may be a predetermined broadcast time. But even given this disclosure, Syed does not further disclose presenting the locally-stored content consistent with the broadcast time for the content, similar to independent Claim 15. That is, other than releasing content at its broadcast time, Syed does not disclose that the content is presented consistent with its broadcast time.

Appellants therefore respectfully submit that independent Claim 15, and by dependency Claims 16-18 and 20-29, is patentably distinct from Watson and Syed, taken individually or in any proper combination. Appellants also respectfully submit that independent Claims 30, 45 and 60 recite subject matter similar to that of independent Claim 15, including the aforementioned

schedule, and presenting content (accessed from memory) as that same content consistent with the scheduled time for broadcast of the same content by a content source. As such, Appellants respectfully submit that independent Claims 30, 45 and 60, and by dependency Claims 31-33, 35-44, 46-48, 50-59 and 61-73, are also patentably distinct from Watson and Syed, taken individually or in any proper combination, for at least the reasons given above with respect to independent Claim 15.

1. Claims 16, 31, 46 and 61

In addition to the foregoing reasons, Appellants respectfully submit that various ones of dependent Claims 16-18, 20-29, 31-33, 35-44, 46-48, 50-59 and 61-73 recite features further patentably distinct from Watson and Syed, taken individually or in any proper combination. An example of such a feature is explained below with respect to dependent Claims 16, 31, 46 and 61. Initially, however, Appellants note that the Examiner rejects dependent Claim 16 as being unpatentable over Watson, in view of Syed. The Examiner then cites the rejection of Claim 16 as the same basis for rejection of dependent Claim 31. Final Official Action of Aug. 4, 2009, page 16. Inexplicably, however, the Examiner does not reject Claim 31 as being unpatentable over Watson, in view of Syed (as Claim 16), but instead rejects Claim 31 as being unpatentable over Watson, in view of Connelly.

Dependent Claim 16 (and similarly Claims 31, 46 and 61) recites that the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform synchronizing the accessed piece(s) of pre-broadcast content with the same piece(s) of content broadcast by the content source. Presenting the accessed piece(s) of pre-broadcast content, then, includes presenting the synchronized piece(s) of pre-broadcast content. This feature is also absent from Watson, Syed and Connelly, taken individually or in any proper combination.

The Examiner cites Watson for allegedly disclosing this feature of the claimed invention. Briefly, Watson discloses a digital home movie library for an on-demand movie service. And in this regard, Watson may disclose a digital asset management system that schedules when a movie is to be transmitted to a set-top box. Watson may also disclose setting a start date at

which time a transmitted movie may be accessed from the set-top box. Even given this disclosure, however, Watson does not teach or suggest synchronizing any movie (content) stored on its set-top box with the same movie (the same content) broadcast by a content source, similar to dependent Claims 16, 31, 46 and 61 synchronizing pre-broadcast content with the same content broadcast by a content source.

The Examiner cites paragraph [0091] of Watson for supporting the assertion that Watson discloses the feature of Claims 16, 31, 46 and 61, and in doing so, the Examiner parenthetically states “movie content on the hard disk drive is turned over periodically, as scheduled by the digital assistant manager.” Final Official Action of Aug. 4, 2009, page 5. Again, however, Appellants submit that turning over or otherwise cycling through movies stored on a set-top box is not the same as synchronizing a stored movie with the same movie broadcast by a content source.

B. Claims 24, 26, 28, 54, 56, 58, 68, 70 and 72

The Examiner rejects Claims 24, 26, 28, 54, 56, 58, 68, 70 and 72 as being unpatentable over Watson in view of Syed, and further in view of Connelly. As explained above, independent Claims 15, 30, 45 and 60, and by dependency Claims 16-29, 31-44, 46-59 and 61-73, are patentably distinct from Watson and Syed, taken individually or in any proper combination. Appellants respectfully submit that Connelly does not cure the deficiencies of Watson and Syed. That is, even considering Connelly, none of Watson, Syed or Connelly, taken individually or in any proper combination, teaches or suggests the aforementioned schedule, and presenting content (accessed from memory) consistent with the scheduled time for broadcast of the same content, as per independent Claims 15, 30, 45 and 60. Appellants therefore respectfully submit that independent Claims 15, 45 and 60, and by dependency Claims 24, 26, 28, 54, 56, 58, 68, 70 and 72, are patentably distinct from Watson in view of Syed, and further in view of Connelly.

C. Claims 21, 51 and 65

The Examiner rejects Claims 21, 51 and 65 as being unpatentable over Watson in view of Syed, and further in view of Traw. As explained above, independent Claims 15, 30, 45 and 60,

and by dependency Claims 16-29, 31-44, 46-59 and 61-73, are patentably distinct from Watson and Syed, taken individually or in any proper combination. Appellants respectfully submit that Traw does not cure the deficiencies of Watson and Syed. That is, even considering Traw, none of Watson, Syed or Traw, taken individually or in any proper combination, teaches or suggests the aforementioned schedule, and presenting content (accessed from memory) consistent with the scheduled time for broadcast of the same content, as per independent Claims 15, 30, 45 and 60. Appellants therefore respectfully submit that independent Claims 15, 45 and 60, and by dependency Claims 21, 51 and 65, are patentably distinct from Watson in view of Syed, and further in view of Traw.

D. Claims 30-33, 35, 37-44

The Examiner rejects Claims 30-33, 35, 37-44 as being unpatentable over Watson, in view of Connelly. However, similar to independent Claim 15, in contrast to independent Claim 30, neither Watson nor Connelly, taken individually or in any proper combination, teaches or suggests storing but not accessing pre-broadcast content before a scheduled time for broadcast of the same content, and presenting the pre-broadcast content consistent with that scheduled time.

1. Broadcast Schedule

More particularly, in contrast to independent Claim 30, neither Watson nor Connelly, taken individually or in any proper combination, teaches or suggests an apparatus for providing broadcast content whereby a schedule includes a scheduled time for not only broadcasting the content by its source, but also constraining access to the same (pre-broadcast) content from memory of a terminal that previously stored the pre-broadcast content.

As previously explained, Watson discloses a digital home movie library for an on-demand movie service. And in this regard, Watson may disclose setting a start date or an end date specifying when a transmitted movie may be accessed from the set-top box. Contrary to a suggestion of the Examiner, however, setting dates on which a transmitted movie may be accessed does not correspond to a scheduled time for broadcast of a movie, similar to the scheduled time of independent Claim 30.

The Examiner cites Connelly for allegedly disclosing accessing the pre-broadcast content from memory no sooner than the scheduled time for broadcast of the same content. To the contrary, however, Appellants respectfully submit that like Watson, Connelly also does not teach or suggest these features of independent Claim 30. Briefly, Connelly discloses a system including a server for broadcasting meta-data to a plurality of clients, where the meta-data describes data files that are to be later broadcast or potentially broadcast by the server. A client receives the meta-data, and based on the meta-data as well as previous access habits of the user and optional user classifications, selectively receives and/or stores the later-broadcast data files. One may therefore argue that Connelly discloses a client storing meta-data before broadcast of content described by the meta-data. Independent Claim 30, on the other hand, recites storing content before the scheduled time for broadcast of the same content. And to the extent that one may argue that Connelly stores meta-data, nowhere does Connelly disclose that its meta-data is stored before the scheduled time for broadcast of the same meta-data (i.e., the same content), similar to independent Claim 30.

2. Access from Memory as Content Broadcast

In further contrast to independent Claim 30, neither Watson nor Connelly, taken individually or in any proper combination, teaches or suggests providing broadcast content, whereby pre-broadcast content in memory of an apparatus is presented consistent with the scheduled time for broadcast of the same content by a content source. The Examiner also cites Connelly for allegedly disclosing this feature of the present invention. Appellants respectfully submit, however, that Connelly does not in fact disclose accessing content from memory of an apparatus consistent with the scheduled time for broadcast of the same content by a content source. Connelly may disclose receiving meta-data consistent with the schedule for broadcast of the meta-data, but receiving meta-data consistent with the broadcast schedule of the same meta-data is not the same as accessing content from memory consistent with the broadcast schedule of the same content, similar to independent Claim 30.

Appellants therefore respectfully submit that independent Claim 30, and by dependency Claims 31-33, 35 and 37-44, is patentably distinct from Watson and Connelly, taken individually or in any proper combination.

E. Claim 36

The Examiner rejects Claim 36 as being unpatentable over Watson in view of Connelly, and further in view of Traw. As explained above, independent Claims 15, 30, 45 and 60, and by dependency Claims 16-29, 31-44, 46-59 and 61-73, are patentably distinct from Watson and Connelly, taken individually or in any proper combination. Appellants respectfully submit that Traw does not cure the deficiencies of Watson and Connelly. That is, even considering Traw, none of Watson, Connelly or Traw, taken individually or in any proper combination, teaches or suggests the aforementioned schedule, and presenting content (accessed from memory) consistent with the scheduled time for broadcast of the same content, as per independent Claims 15, 30, 45 and 60. Appellants therefore respectfully submit that independent Claim 30, and by dependency Claim 36, is patentably distinct from Watson in view of Connelly, and further in view of Traw.

8. *Claims Appendix.*

The claims subject to this appeal are as follows:

Claims 1-14 (Cancelled)

15. (Previously Presented) An apparatus comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following:

storing, in the memory, at least one piece of pre-broadcast content, the pre-broadcast content being stored before a scheduled time for broadcast of the same at least one piece of content by a content source, the scheduled time specified by a schedule;

accessing at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same at least one piece of content; and

presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

16. (Previously Presented) An apparatus according to Claim 15, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

synchronizing the accessed at least one piece of pre-broadcast content with the same at least one piece of content broadcast by the content source,

wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting the synchronized at least one piece of pre-broadcast content.

17. (Previously Presented) An apparatus according to Claim 15, wherein storing at least one piece of pre-broadcast content comprises storing at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content.

18. (Previously Presented) An apparatus according to Claim 15, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

receiving at least one piece of content maintained by a continuity server of a content source,

wherein storing at least one piece of pre-broadcast content comprises storing the received at least one piece of content as the at least one piece of pre-broadcast content.

19. (Cancelled)

20. (Previously Presented) An apparatus according to Claim 18, wherein receiving at least one piece of content comprises receiving an encoded at least one piece of content and decoding the encoded at least one piece of content, the respective at least one piece of content having been at least one of encoded or transcoded at the content source.

21. (Previously Presented) An apparatus according to Claim 15, wherein the schedule also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

receiving at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content, and

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory or at least one piece of live broadcast content received at the apparatus, and wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

22. (Previously Presented) An apparatus according to Claim 15, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

releasing each piece of pre-broadcast content when a current time of the apparatus matches the scheduled time for broadcast of the same piece of content by the content source, wherein accessing at least one piece of pre-broadcast content comprises accessing at least one released piece of pre-broadcast content.

23. (Previously Presented) An apparatus according to Claim 22, wherein the content source broadcasts the same at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

synchronizing the current time of the apparatus with the current time of the content source.

24. (Previously Presented) An apparatus according to Claim 22, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and

maintaining, in the memory of the apparatus, at least one expired piece of pre-broadcast content.

25. (Previously Presented) An apparatus according to Claim 22, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and

deleting, from the memory of the apparatus, at least one expired piece of pre-broadcast content.

26. (Previously Presented) An apparatus according to Claim 25, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

maintaining at least one expired piece of pre-broadcast content in the memory of the apparatus,

wherein deleting at least one expired piece of pre-broadcast content comprises overwriting at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content.

27. (Previously Presented) An apparatus according to Claim 15, wherein storing at least one piece of pre-broadcast content further comprises storing the schedule.

28. (Previously Presented) An apparatus according to Claim 27, wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

receiving a selection of at least one piece of pre-broadcast content for the at least one slot; and

modifying the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

29. (Previously Presented) An apparatus according to Claim 15, wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

receiving at least one slot of the schedule at the apparatus,

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one piece of pre-broadcast content in accordance with the at least one slot received at the apparatus.

30. (Previously Presented) A method comprising:

storing, in a memory of an apparatus, at least one piece of pre-broadcast content, the at least one piece of pre-broadcast content being stored before a scheduled time for broadcast of the same at least one piece of content by a content source, the scheduled time specified by a schedule;

accessing at least one piece of pre-broadcast content from the memory of the apparatus no sooner than the scheduled time for broadcast of the same at least one piece of content; and

presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

31. (Previously Presented) A method according to Claim 30 further comprising:

synchronizing the accessed at least one piece of pre-broadcast content with the same at least one piece of content broadcast by the content source,

wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting the synchronized at least one piece of pre-broadcast content.

32. (Original) A method according to Claim 30, wherein storing at least one piece of pre-broadcast content comprises storing at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content.

33. (Previously Presented) A method according to Claim 30 further comprising:

receiving, at the apparatus, at least one piece of content maintained by a continuity server of a content source,

wherein storing at least one piece of pre-broadcast content comprises storing the received at least one piece of content as the at least one piece of pre-broadcast content.

34. (Cancelled)

35. (Previously Presented) A method according to Claim 33 further comprising:
processing at least one piece of content at the content source, and thereafter sending the
processed at least one piece of content to the apparatus, wherein processing at least one piece of
content comprises at least one of encoding or transcoding at least one piece of content,
wherein receiving at least one piece of content comprises receiving the processed at least
one piece of content, and when the content source encodes the at least one piece of content,
decoding the encoded at least one piece of content.

36. (Previously Presented) A method according to Claim 30, wherein the schedule
also specifies at least one scheduled time for broadcast of at least one piece of live broadcast
content by the content source, and wherein the method further comprises:

receiving, at the apparatus, at least one piece of live broadcast content when a current
time matches the scheduled time for broadcast of the respective at least one piece of live
broadcast content,

wherein accessing at least one piece of pre-broadcast content comprises accessing at least
one of at least one piece of pre-broadcast content stored in the memory of the apparatus or at
least one piece of live broadcast content received at the apparatus, and wherein presenting the
accessed at least one piece of pre-broadcast content comprises presenting at least one of the
accessed at least one piece of pre-broadcast content or the accessed at least one piece of live
broadcast content.

37. (Previously Presented) A method according to Claim 30 further comprising:
releasing each piece of pre-broadcast content when a current time of the apparatus
matches the scheduled time for broadcast of the same piece of content by the content source,
wherein accessing at least one piece of pre-broadcast content comprises accessing at least
one released piece of pre-broadcast content.

38. (Previously Presented) A method according to Claim 37, wherein the content source broadcasts the same at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the method further comprises:
synchronizing the current time of the apparatus with the current time of the content source.

39. (Previously Presented) A method according to Claim 37 further comprising:
expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and
maintaining, in the memory of the apparatus, at least one expired piece of pre-broadcast content.

40. (Previously Presented) A method according to Claim 37 further comprising:
expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and
deleting, from the memory of the apparatus, at least one expired piece of pre-broadcast content.

41. (Previously Presented) A method according to Claim 40 further comprising:
maintaining at least one expired piece of pre-broadcast content in the memory of the apparatus,
wherein deleting at least one expired piece of pre-broadcast content comprises
overwriting at least one expired piece of pre-broadcast content maintained in memory with at least one subsequent piece of pre-broadcast content.

42. (Original) A method according to Claim 30, wherein storing at least one piece of pre-broadcast content further comprises storing the schedule.

43. (Previously Presented) A method according to Claim 42, wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time, and wherein the method further comprises:

receiving a selection of at least one piece of pre-broadcast content for the at least one slot;
and

modifying the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

44. (Previously Presented) A method according to Claim 30, wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, and wherein the method further comprises:

receiving at least one slot of the schedule at the apparatus,

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one piece of pre-broadcast content in accordance with the at least one slot received at the apparatus.

45. (Previously Presented) A computer program product for providing broadcast content, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein that in response to execution by a processor cause an apparatus to at least perform the following:

storing, in a memory of the apparatus, at least one piece of pre-broadcast content, the at least one piece of pre-broadcast content being stored before a scheduled time for broadcast of the same at least one piece of content by a content source, the scheduled time specified by a schedule;

accessing at least one piece of pre-broadcast content from the memory of the apparatus no sooner than the scheduled time for broadcast of the same at least one piece of content; and

presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

46. (Previously Presented) A computer program product according to Claim 45, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

synchronizing the accessed at least one piece of pre-broadcast content with the same at least one piece of content broadcast by the content source,

wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting the synchronized at least one piece of pre-broadcast content.

47. (Previously Presented) A computer program product according to Claim 45, wherein storing at least one piece of pre-broadcast content comprises storing at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content.

48. (Previously Presented) A computer program product according to Claim 45, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

receiving, at the apparatus, at least one piece of content maintained by a continuity server of a content source,

wherein storing at least one piece of pre-broadcast content comprises storing the received at least one piece of content as at least one piece of pre-broadcast content.

49. (Cancelled)

50. (Previously Presented) A computer program product according to Claim 45, wherein receiving at least one piece of content comprises receiving an encoded at least one piece of content and decoding the encoded at least one piece of content, the respective at least one piece of content having been at least one of encoded or transcoded at the content source.

51. (Previously Presented) A computer program product according to Claim 45, wherein the schedule also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, and wherein the wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

receiving, at the apparatus, at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content, and

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory of the apparatus or at least one piece of live broadcast content received at the apparatus, and wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

52. (Previously Presented) A computer program product according to Claim 45, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

releasing each piece of pre-broadcast content when a current time of the apparatus matches the scheduled time for broadcast of the same piece of content by the content source,

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one released piece of pre-broadcast content.

53. (Previously Presented) A computer program product according to Claim 52, wherein the content source broadcasts the same at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

synchronizing the current time of the apparatus with the current time of the content source.

54. (Previously Presented) A computer program product according to Claim 52, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and

maintaining, in the memory of the apparatus, at least one expired piece of pre-broadcast content.

55. (Previously Presented) A computer program product according to Claim 52, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time; and

deleting, from the memory of the apparatus, at least one expired piece of pre-broadcast content.

56. (Previously Presented) A computer program product according to Claim 55, wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

maintaining at least one expired piece of pre-broadcast content in the memory of the apparatus,

wherein deleting at least one expired piece of pre-broadcast content comprises overwriting at least one expired piece of pre-broadcast content maintained in memory with at least one subsequent piece of pre-broadcast content.

57. (Previously Presented) A computer program product according to Claim 45, wherein storing at least one piece of pre-broadcast content further comprises storing the schedule.

58. (Previously Presented) A computer program product according to Claim 57, wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time, and wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

receiving a selection of at least one piece of pre-broadcast content for the at least one slot;
and

modifying the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

59. (Previously Presented) A computer program product according to Claim 45, wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, and wherein the computer-readable storage medium has computer-readable program code portions stored therein that in response to execution by the processor cause the apparatus to further perform the following:

receiving at least one slot of the schedule at the apparatus,

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one piece of pre-broadcast content in accordance with the at least one slot received at the apparatus.

60. (Previously Presented) A system comprising:

a content source comprising a continuity server configured to maintain at least one piece of content and a schedule, wherein the schedule specifies at least one scheduled time for broadcast of the at least one piece of content by the content source, and wherein the content source is configured to broadcast the at least one piece of content in accordance with the schedule; and

a terminal configured to store, in a memory, at least one piece of pre-broadcast content comprising the same at least one piece of content maintained by the continuity server, the terminal being configured to store the at least one piece of pre-broadcast content before the scheduled time for broadcast of the same at least one piece of content, wherein the terminal is configured to access the at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same at least one piece of content, and thereafter present the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

61. (Previously Presented) A system according to Claim 60, wherein the terminal is configured to synchronize the accessed at least one piece of pre-broadcast content with the same at least one piece of content broadcast by the content source before presenting the accessed at least one piece of pre-broadcast content, and wherein the terminal is configured to present the synchronized at least one piece of pre-broadcast content.

62. (Previously Presented) A system according to Claim 60, wherein the terminal is configured to store the at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content.

63. (Previously Presented) A system according to Claim 60, wherein the content source is configured to send, to the terminal, the at least one piece of content maintained by the continuity server, and wherein the terminal is configured to receive and store the received at least one piece of content as the at least one piece of pre-broadcast content.

64. (Previously Presented) A system according to Claim 63, wherein the content source is configured to at least one of encode or transcode the at least one piece of content and the schedule before sending the at least one piece of content and the schedule to the terminal, and wherein when the content source encodes the at least one piece of content, the terminal is configured to receive the encoded at least one piece of content, and thereafter decode the encoded at least one piece of content.

65. (Previously Presented) A system according to Claim 60, wherein the schedule maintained by the continuity server also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, wherein the terminal is configured to receive at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content, wherein the terminal is configured to access at least one of at least one piece of pre-broadcast content stored by the terminal and at least one piece of live broadcast content received by the terminal, and wherein the terminal is configured to present at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

66. (Previously Presented) A system according to Claim 60, wherein the terminal is configured to release each piece of pre-broadcast content when a current time of the terminal matches the scheduled time for broadcast of the same piece of content by the content source, and wherein the terminal is configured to access at least one released piece of pre-broadcast content.

67. (Previously Presented) A system according to Claim 66, wherein the content source is configured to broadcast the at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the terminal is also configured to synchronize the current time of the terminal with the current time of the content source.

68. (Previously Presented) A system according to Claim 66, wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to the scheduled time, and wherein the terminal is configured to maintain, in the memory, at least one expired piece of pre-broadcast content.

69. (Previously Presented) A system according to Claim 66, wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to the scheduled time, and wherein the terminal is configured to delete, from the memory, at least one expired piece of pre-broadcast content.

70. (Previously Presented) A system according to Claim 69, wherein the terminal is configured to maintain at least one expired piece of pre-broadcast content in the memory of the terminal, and wherein the terminal is configured to overwrite at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content.

71. (Previously Presented) A system according to Claim 60, wherein the terminal is also configured to store a schedule comprising the same schedule maintained by the continuity server.

72. (Previously Presented) A system according to Claim 71, wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time, wherein the terminal is configured to receive a selection of at least one piece of pre-broadcast content for the at least one slot, and thereafter modify the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

73. (Previously Presented) A system according to Claim 60, wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, wherein the terminal is configured to receive at least one slot of the schedule, and wherein the

terminal is configured to access at least one piece of pre-broadcast content in accordance with the at least one slot received by the terminal.

9. ***Evidence Appendix.***

None.

10. ***Related Proceedings Appendix.***

None.

CONCLUSION

For at least the foregoing reasons, Appellants respectfully request that the rejections be reversed.

Respectfully submitted,



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ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON FEBRUARY 2, 2010 (ORIGINALLY SUBMITTED OCTOBER 16, 2009).